

REMARKS

Claims 1, 3, 6, 7, 9 and 11 to 13 have been amended. Claims 1 to 15 remain active in this application of which claims 3 and 9 were indicated to be allowable, though their dependency has now been changed.

Claims 1, 2, 4 to 8 and 10 to 15 were rejected under 35 U.S.C. 102(e) as being anticipated by Tolles (U.S. 6,702,651). The rejection is respectfully traversed.

Claim 1 requires, among other features, an extension on said dispenser coupled to a distal end of said dispenser for delivering said wash solution to an area proximate to and including said center axis for cleaning said slurry from said polishing pad. No such feature is taught or suggested by Tolles. To begin with, it has been determined in accordance with the present invention that a problem exists in the buildup of debris at the very center and at the axis of the cleaning pad, a region not washed or not completely washed by the prior art washing procedures. This problem, which has gone unrecognized, is alleviated by directing washing solution directly at the axis of the pad as well as the regions therearound. Nothing in Tolles teaches or suggests the problem or its solution. In order for the arm 40 of Tolles to provide wash water to the axis of the pad, it would be necessary that the arm either extend beyond the center of the pad and have nozzles at the pad center or have nozzles aimed at the pad center. Nothing of the sort is taught or suggested by Tolles. It follows that Tolles fails to teach or even suggest the feature noted above in claim 1 or the combination as claimed.

Claims 2 to 6 therefore define patentably over Tolles for at least the reasons presented above with reference to claim 1.

Claim 2 further limits claim 1 by requiring that the extension include piping and a spray nozzle, the piping coupled to and extending from the dispenser toward the center axis, the spray nozzle coupled to the piping and cooperable therewith to direct a water spray to the polishing pad at a ninety degree angle. No such structure is found in Tolles, especially since Tolles fails to have an extension in the first place.

Claim 3 was found to be allowable when depending from claim 2 and should also be allowable in its present form.

Claim 7 contains structure similar to that discussed in connection with claim 1 and thereof defines patentably over Tolles for the reasons presented above in connection with claim 1.

Claims 8 to 11 depend from claim 7 and therefore define patentably over Tolles for at least the reasons presented above with reference to claim 7

Claim 8 is substantially the same as claim 2 and therefore the argument presented as to claim 2 applies except for the dependency.

The argument presented above as to claim 3 applies as well to claim 9.

Claim 12 requires, among other steps, dispensing a wash material directly to the most center portion of the polishing surface about and including the axis. As discussed above with reference to claim 1, Tolles does not teach or suggest washing at the most center portion of the polishing surface about and including the axis.

Claims 13 to 15 depend from claim 12 and therefore define patentably over Tolles for at least the reasons presented above with reference to claim 12.

Claim 13 further limits claim 12 by requiring providing a spray arm for dispensing wash material and providing a spray extension which is coupled to the

dispensing arm of chemical mechanical polishing system for dispensing wash material directly to the most center portion of polishing surface about and including axis. As discussed above with reference to claim 1, no extension is found in Tolles nor does Tolles teach or suggest the function of the provided spray extension as claimed.

said axis.

In view of the above remarks, favorable reconsideration and allowance are respectfully requested.

Respectfully submitted,



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